REMARKS

The Examiner's Office Action of December 20, 2001 is based upon 35 U.S.C. §112, ¶2 as rejecting claim 8 for improper punctuation. That error has been corrected, and a corrected set of the claims is attached hereto. The Examiner's Office Action of December 20, 2001 is also based upon 35 U.S.C. §103(a) as rejecting claims 1-5, and 13 over Siebold (U.S. Patent No. 4,420,706) or Hackett (U.S. Patent No. 4,042,845) in view of Haertl (U.S. Patent No. 4,987,597) or Marren (U.S. Patent No. 5,222,050). In addition, the Examiner rejected claims 6-12 over Carr in view of Siebold or Hackett in view or Haertl or Marren, and further in view of Press (U.S. Patent No. 6,105,214).

Specifically, the Examiner states that "Claims 1-5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siebold et al. . . . or Hacket . . . in view of Haertl . . . or Marren et al.[.]" Further the Examiner states that "[t]he only difference between claims 1 and 13 and the device of Hackett or Siebold is that the front face of Hackett's or Siebold's unit is not provided with a water resistant or sound permeable barrier. However, as taught by either Marren . . . or Haertl . . . it is extremely well known that a barrier formed of polytetrafluoroethylene is sound permeable but water-impermeable, and can be applied to a transducer housing." Respectfully, applicant submits that it would be improper to combine the references as asserted, and that even if it were proper to combine such references, such a combination would not result in the invention as presently claimed.

First, the problems being addressed by Siebold and Hackett on the one hand and Haertl and Marren on the other are different from each other, and thus there is no suggestion or teaching to combine such references. Hackett is a transducer assembly which is concerned with methods for radiating and detecting energy over a controlled beam width. ('845 patent, col. 1, lines 7-9). Hackett neither suggests a problem with nor proposes solutions to the issue of providing an audible signal transducer assembly which includes a barrier against liquids, while at the same time generating a signal that is not dampened in decibel level by the barrier. Likewise, Siebold does not suggest or teach the use of water barriers for sound chambers to transducer housings – rather, Siebold simply generally addresses the basic components of a transducer and the electric connection of such transducers to other circuitry. ('706 patent, col. 1, lines 12-15).

The secondary references relied upon by the Examiner are non-analogous prior art, and when viewed as a whole, teach away from the invention set forth in Applicant's claims. Haertl discloses an apparatus for closing openings in a hearing aid, not a transducer or transducer housing. ('597 patent, Col. 1, lines 11-12). Haertl seems particularly concerned with a removable cap and membrane combination which can be snapped on or screwed on (Col. 4, lines 1-25) to allow removal for cleaning in an ultrasound bath. (Col. 4, line 56 - col. 5, line 3). Haertl does not teach attachment to a transducer housing, nor does it teach attachment to a housing using a hot melt, sonic weld, silicone adhesive, or similar fastening means, as called for in claims 3-5.

The only secondary reference which specifically references transducer housings is Marren, which uses as a water resistant transducer housing with hydrophobic vent for ear plugs for radio equipped divers (col. 1, lines 10-15). Marren describes a housing which includes a sound chamber and a separate motor chamber which is completely sealed from the sound chamber and contains an audio frequency motor and diaphragm. (Col. 2, lines 49-68). Marren does not teach the use of polytetraflouroetyhlene as a sound permeable water barrier to the sound chamber. To the contrary, Marren disparages the use of such a barrier in its discussion of the prior art (i.e., the Haertl patent), noting that its attempt to use polytetraflouroetyhlene as a sound permeable water barrier "introduced an unacceptable degree of sound absorption." (Col. 1, lines 40-46). Thus, Marren took the different approach of 1) using selective seal system, and 2) applying such a selective seal system for passing air freely (but not water) from the motor chamber, as opposed to the sound chamber. (Col. 3, lines 1-6).

Claims 6-12 were rejected under 35 U.S.C. §103(a) based upon the same combination of references cited above, and further in view of Press. The same points raised above regarding Haertl, Hackett, Siebold and Marren are likewise applicable to this rejection. In addition, Press is non analogous prior art, and there is no suggestion or teaching to combine it with the other references relied upon in rejecting claims 6-12. Press relates to a water resistant slide fasteners for use with high performing outerwear, jackets, coats, pants, gloves, backpacks, daypacks, and the like. ('214 patent, col. 1, lines 8-14). Press teaches the use of a pair of stringer tapes teach having a first and second opposed surface, with gripper elements positioned along the edge of the

first surface, and a water resistant layer on the second surface. (Col. 2, lines 26-32). Nothing in Press suggests using a water resistant fastener in combination with an water resistant, air permeable barrier. Likewise, nothing in Press suggests using the garment fastener it teaches in a transducer housing assembly.

CONCLUSION

In light of the above, Applicant respectfully submits that Claims 1-13 are in condition for allowance. However, should an allowance not be forthcoming, Applicant requests that the undersigned attorney be contacted prior to the issuance of any further Office Action.

Respectfully submitted,

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Date: May 24, 2002